LOADSTAR LETTER 64 #38

Threshold Takeover

In September Threshold Productions International announced that a takeover process of operations by Arkanix Labs is finally complete. Arkanix Labs is taking over all day-to-day operations of TPI and will fulfill any and all of TPI's prior obligations."We feel Arkanix Labs will be able to better realize the ideals previously set by TPI. Our hopes are that Arkanix Labs can provide for the customer where we have lacked in the past therefore insuring a bright future for the Commodore 64/128 community."

Arkanix Labs will be using the Seattle address for all mailings.The previous message number for TPI is now defunct. Jonathan Mines will continue to provide the Driven mail subscriptions. For further information contact Petar Strinic, petars@arkanixlabs.com We have a WWW homepage at www.arkanixlabs.com

SSI Drops C=

Software Support International (SSI), a long time player in the Commodore market, will be dropping their line of Commodore products at the end of the year.SSI carries loads of new software and some hardware at very competitive prices.SSI is also the exclusive distributor of many software titles and products, such as the Maverick disk copier and 1750 clone 512K RAM expander.Call 1-800-356-1179 for a free catalog.

Commodore Evolves Into Emerson?

Visual Information Service Corp. (NASDAQ: VICP, Bulletin Board) ("VIScorp") and Emerson Radio Corp. (AMEX:MSN), announced today that they have entered into a letter of intent granting Emerson the North and South American exclusive retail distribution and sales rights to VIScorp's interactive Internet television set-top device, the Universal Internet-Television Interface(R) (UITI(R)), and the UITI(R)-TV interactive "smart" television set. Terms have not been disclosed, pending a definitive agreement. However, pursuant to the letter of intent, VIScorp would be granted warrants to purchase up to a maximum of one million shares of Emerson common stock at an exercise price of $6 per share. "The UITI(R) provides new and exciting entertainment, information and telecommunications capabilities using any standard television set, including easy access to the Internet, World Wide Web and on-line services,"" said William Buck, Chief Executive officer of VIScorp. "The Emerson Radio branded set-top device will dramatically expand the capabilities of the family TV set by providing TV viewers a host of services like e-mail, on-line chat and Net surfing that have, until now, been available only to those who own personal computers. "The UITI(R) is more than a network computer (NC) as it turns the TV set into a sophisticated communications center, offering an on-screen menu, a speaker phone, the ability to send and receive fax messages, on-screen caller identification (Caller ID) where available, calendar, telephone and address storage, and other services. In addition, it comes with a series of "in-ROM" interactive multimedia games so that it provides greater value to the whole family," Mr. Buck continued.

VIScorp explains

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Why Is It So Hard To Get A Shell Account?

By Scott Eggleston. Jeff has brought it to my attention the difficulty some readers have had in finding a Unix shell account in their area. This can be a problem for those with Commodores trying to get on the Internet.

For those unaware, a Unix shell account is basically a text-based Internet connection that requires a terminal program and VT-100 emulation. This is found on al l popular Commodore Terms (DesTerm, Dialogue, Novaterm), and makes surfing the net a reality--without the graphics.

Some providers may not offer this simply because it's not in demand. After all, the only ones who'll desire this feature are Commodore users and Unix hackers. Compare those numbers to the millions who use Netscape or Explorer, and you have little demand to supply.

Another reason may be the illegal use of Unix programming. I have a shell account through Brigham Young University. It's good, but doesn't allow you to drop to the Unix prompt, useful for directory maintenance, changing transfer protocols, Unix programming, etc. Apparently some bonehead had written a program which generated accounts for him and his friends, giving them free access. Instead of invoking some security program, BYU simply removed everyone's Unix prompt privileges. This may be why some providers don't offer a Unix shell at all.

If you can't seem to find a provider with a shell account, there are some things you can try. First, call them all up. Your

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STAR WAREZ

By S. Freedline. Welcome to the Wonderful World of Public Domain, Shareware, and Freeware programs. Each month I hope to bring you the best of the software available from the "connected" world of Commodore ftp sites, world wide web sites, and on-line services absolutely free, except of course for the cost of the disk itself.

Since this month is the first edition, I wanted to make it something really special. So I searched high and low for a mixture of programs. I've included programs for every Commodore taste -- games, GEOS, utilities, text and demos -- all on two sides of a 1541 formatted 5.25"disk.

The fun begins with two games for the Commodore 64: Slither and 4k Compo. Slither is an older game, but one I've loved for years. Load the game up and you'll become Slither, a hungry snake that you must guide safely through the maze to his fruity treat. Slither loses a life every time he hits the side of the maze or if he happens to try to double back and touches his own slimy snake body. 4k Compo is an all new game created by Crossbow of the demo group Crest specifically for the 4k NTSC Competition sponsored by Driven Magazine. It placed 6th out of seventeen entries in both the Official Competition and the Public Poll. The file actually contains two well done games; Pac Man and Mah Jongg. The only item missing from the 4k Compo is a bit of music; but, the competition restricted the entries to 4k and there's only so much you can do with a size limitation such as this. Nevertheless, I'm sure you'll still enjoy the games.

Next up is Eternal, a brand new Commodore 64 demo released on August 15th by Dokken of Electron. Electron left the scene a few years ago and returns with one of the best demos I've seen to date. Both the music and color routines are truly incredible, not to mention the banter featured at the end of the demo. A word of caution is unfortunately required though because Eternal does contain a word of profanity along with a tiny bit of adult oriented text.

Three issues of Bonkers are provided to quench your thirst for knowledge. Each issue is devoted to the task of teaching the world the great art of machine language coding. Issue three walks you through the code to create a "note-maker" (a mini-word processor) of your very own.

The logic behind the creation of Bonkers is to share one's coding skills with others in order to enlarge the Commodore programming base. If more people know how to program there will be more programs for us all to enjoy!

Little Red Reader knocks down the barriers of MS-DOS files. Craig Bruce's all new updated version 2.5 is a MS-DOS file reader and copier for the Commodore 128. Either a 1581 or 1571 disk drive is required. It's a little tough to figure out, but fortunately documentation is included. [*Note that on LOADSTAR 128 #32, Fender re-engineered this program to make it easier to use.*]

Mike's Maze v2 is a maze game for the Commodore 128 in 40 columns that resulted from a discussion of random numbers. The file is only 12 blocks long; however, you won't believe the fun you can have as a result of those 12 nicely coded blocks! The game displays a large maze on the screen. You are the black dot located at the bottom right of the display. The object is to reach the end of the maze. Due to the complexity of some of these mazes, you may find that quite a challenge in itself. Additionally, if you happen to touch the side of the maze you'll instantly be zapped back to the start of the maze. Finish the maze and you'll advance to an all new more challenging level.

The second side of the 1541 disk is almost totally devoted to GEOS programs. A large selection of desk

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The Mondo Monitor Switch

by Scott Eggleston. For some reason unknown to me, Commodore designed and marketed some of the best composite monitors I've ever seen. The '02 series (1702/1802/2002) all had separate inputs for Chroma and Luma, which create an incredibly sharp picture when combined.

Another interesting feature of these creatures is the additional video and audio inputs on the front of the monitor (although I can only confirm these exist on the 1702). A switch on the back of the unit toggles output between the separate inputs. Apparently some engineer wanted to be able to watch football and program during the commercials. This is entirely possible with the separate inputs, but there is an even better use for Commodore enthusiasts.

I use two computers quite regularly. These consist of an older, brown 64, and a 128. I also use two monitors, an 80 column/composite Magnavox for the 128, and a 1702 for the 64. Both computers have shared the composite 1702, one using the split rear input, with the other using the front jacks. Why not use the composite mode on the Magnavox? Well, I just got sick of pressing that stupid button every time I wanted to change modes. When I use GEOS 128, I have to switch modes quite often, and would rather turn my head than constantly push that button like I want to cross the street. The downside of this setup was that only one computer could use the really nice mode of the '02, as there was only one set of Chroma and Luma inputs. I had thought of building a switch, but that takes time, and something around $15 for parts and project box.

Recently, a nifty solution presented itself. While perusing a local Radio Shack, I noticed a 3-way stereo audio selector (cat. #42-2110) for a newly-reduced $6.97. This was simply three

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Editorial Page/Letters To the Editor

The Commodore Christmas Tree

by Scott Eggleston. Have you noticed that the more you expand your Commodore, the more monster-like it becomes? I mean, take my system for example. I got my first C-64 as a birthday present in 1986. I hooked it up to a little black and white TV for a monitor. The only way I had to store programs was to borrow a neighbor's tape drive. Even with this simple setup, I couldn't run the entire thing off of a standard outlet. I had to use three plugs. Flash to the present. I still have the same 64 (although I've replaced the keyboard), but a Handy scanner now hangs out of the user port, while a *Super Snapshot* sticks straight out of an Aprospand that lives in the expansion port (it has a great little reset switch). A converted Sega-style gamepad is parked in joystick port two, and an Animation Station graphics tablet is in port one. Finally, the 64 uses a 1702 monitor. I also have a 128. A *geoCable* runs from the user port, and a 4-meg *RAMLink* does the same from the expansion port. The *RAMLink* houses an expanded 1700 REU (512k) and a *SwiftLink*, which is hooked to a 14.4 *Bocamodem*, of course. The joystick ports on this machine holds a Wico "bat handle" joystick in port two, and 1351 compatible mouse in port one. This machine uses a *Magnavox* 80 column monitor. Did I mention the disk drives? Both machines share three disk drives (only one can control all the drives at any given time) through a homemade serial switch. This includes a 1541, 1581, and a *CMD* HD-100. Oh yeah, let's not forget printers. I use two of them. A *TI MicroWriter* PS23 laser is used exclusively by the 128, while both machines can use my 9-pin dot matrix, a *Panasonic KX-P 2180.*

Now this list of compu-junk is not an attempt to show all of you what cool stuff I own, but to emphasize my "monster" theory. Remember how my initial setup required three plugs? Well, I'm afraid to tell you how many outlets, power strips, and cables it takes to power all this . . . er, stuff. Let's just say I make sure I have lots of surge suppression to prevent spontaneous combustion. I think the fire department would have a field day with any Commodore power user. Anyone who owns or knows someone with a monster like this, knows that cables are strewn everywhere behind your equipment. This is not very pretty, or safe, especially if you have little fingers running around pulling on anything they can grab.

There are several companies that make cable organizers for the PC market, but even these can easily be overwhelmed by the sheer number of necessary power and data tentacles needed for our computers. A simple solution is to hang some kind of "cable catcher" off the back of your desk. This puts all the scattered clutter into a more localized place. Even better is one that is off the ground, so those tiny fingers can't get to them if they crawl under the desk. I purchased a small, plastic tub for this purpose at a thrift store for a mere 50 cents. Make sure you get one large enough to fit all your power supplies in. At any rate, my once-conservative computer, like some genetically engineered mutant, has grown immense, covering my entire desk, and spilling over onto another one. Tendrils extend from the beast, growing into the wall, leeching power. The two-headed monster mesmerizes me daily, as I spend hours looking in both of its eyes, trying to tame it with various complex calculations. It refuses to release me, displaying flashy pictures, and challenging me to games of chance and skill. Sometimes a siren's song will play from one or both of its mouths. It demands more, this creature. More time, more power, more food-disks to digest in its hard stomach. It wants more knowledge via longer connection times to the outside world, to its contacts of various breeds, and configurations. Will it ever end, this expansion mayhem? Perhaps. On the other hand, I don't have a *SuperCPU* yet.

Email On Printers

Email From John: I have talked twice with the Canon headquarters re a printer with built in fonts and color and Epson emulation. I am told by Ted Seitz and Charlie Christianson that I need the built in fonts and the Epson Emulation. The Canon people said that they have not had built in fonts for years.

Jeff: First, the guy on the phone usually knows little about the product. Remember, these are the people who will tell you that the printer won't work with your Commodore because they never heard of a Commodore Interface. Nowadays when people advertise 14 fonts with their printers, they are hyping about a disk included with the printer, full of TrueType fonts. These are PC thingies, of no use to a Commodore user.

John: I am not sure that is true. Is there still, or until recently, a color ink jet that fits my needs (i.e. a sort of Multifont inkjet) hmm I wonder about Star?

Jeff: The last few printers I've owned have had fonts built in as well as the TrueType disk. The Star SJ-144 was such a printer.

John: If I understood you correctly, fonts come on disks (I just received today my Xetec Senior). Surely we cannot access fonts from a disk destined for an IBM- even if I use my BBR? You said TrueType is in the drives? If I understood you correctly, can I call them in the same ways I call fonts from within my TWS to my 1000 multifont? I am still confused over TrueType as opposed to bitmapped as opposed to Postscript. Bottom line: Do you two know of a currently available inkjet that has built in fonts, color and Epson emulation at a reasonable price?

Jeff: My Epson Stylus Color II has built in fonts and it cost me $250. Frankly I think all printers have built in fonts or they couldn't print a text outside of a graphical program. And believe me, any printer that claims to be fast is referring to its print with *internal* fonts, not TrueType.

TrueType is in fact inverted postscript. Instead of the printer carving (rasterizing) the characters from internal vectors, TrueType carves the letters on the computer end from vectors, and graphically prints text with nearly the same quality. People *with* Postscript printers say that postscript is somehow better. You're reading TrueType now. The closest thing to TrueType on the Commodore end is PerfectPrint.

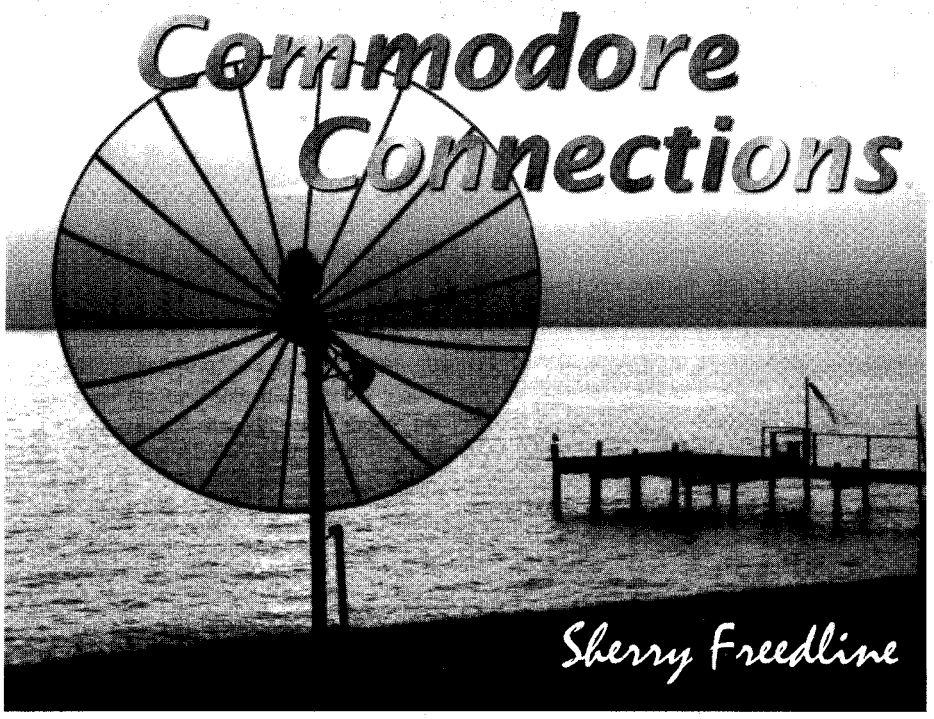

Photo by Frank Vanaman

"The Internet *Is* For Commodores!"

by *S. Freedline.* Hi and welcome to the very first *Commodore Connections* column. My mission is to prove to you that modern day telecommunications aren't just for other platform users. Each month I hope to bring you exciting news of the on-line world which for me consists of on-line services and the Internet. This month I merely want to open your eyes to what a Commodore User can do with an Internet account. In future issues I plan on bringing you information that will help you enjoy those on-line hours to the max. So, without further ado, let's get started.

Many, many times I've heard fellow Commodore users say that the Internet is not for Commodore computers. Well, I'm here to sway those thoughts in the opposite direction. The Internet is just as friendly to Commodore Users as it is to PC and other platform users.

In February of this year I decided to subscribe to a local Internet Service Provider (*ISP*). At this time, I could only access my brand new account with a 2400 baud modem and a terminal program with *VT100* emulation (*Dialogue 128* and *Novaterm 9.5* both provide VT100 emulation). Granted, VT100 emulators could be found for both my Commodore and my PC. But with both systems I was restricted to all text. It didn't take long for me to decide to splurge for a faster modem. Once I got the speed, I also decided I'd just have to go for the gold and upgrade my account by adding a *SLIP/PPP* account to my already existing shell account. An SLIP/PPP account would allow me to access the Internet with a graphics browser which provides a *GUI* (graphics-user interface) for the Internet. Thus, I could finally view the mysterious graphics of the world wide web (WWW). Remember, an SLIP/PPP account must be used with a graphics browser such as *Netscape* or *Microsoft Explorer.* And, as everyone knows, currently there aren't any graphic browsers available for the Commodore. Therefore we are restricted to using a shell account to access the Internet. However, I do know that Maurice Randall, for one, is working on a graphics browser for the Commodore known as *The Wave.* Hopefully it won't be long before we too can view the WWW graphics from the comfort of our Commodores.

Many people out there feel an Internet account isn't a worthwhile investment if they can't view all those wonderful graphics. Well, it's been quite a few months now since I've had access to both a text-only browser and a graphics browser. At first, I really enjoyed viewing all the pretty web pictures. But, now that I've become accustomed to the graphics, it isn't quite as much fun mainly due to the amount of time it takes my PC to download those pictures. I'm not going to lie to you and tell you that they aren't enjoyable, because they are. But, sometimes you just plain don't have the time or the patience to wait for all those pages to load and here is where the beauty of a text-only browser steps in. A Commodore 64 can definitely load any web page faster with it text-only browser than a PC can load a picture-laden web page with a graphics browser.

The point I'm trying to make from the above discussion is merely this: the Internet is more than just a collection of graphics. The Internet can be used to talk to other Commodore Users from around the world. The Internet can be used to access vast libraries of Commodore programs. The Internet can be used to send and receive E-mail. The Internet can be used to read daily newsgroup postings such as those contained in the Commodore devoted comp.sys.cbm. And this is just the beginning.

For me, the Internet has added to my enjoyment of my Commodore computers. Since the first time I connected my Commodore to an on-line service, I have been a huge demo addict. I was under the impression that the biggest collection of demos existed within the walls of these on-line services. For many years, this was indeed true. However, on-line services such as Compuserve, Delphi, and Genie have guidelines they must follow. This restricted some demos from ever appearing within their libraries. In February, I discovered a way to access those demos that didn't conform to the restrictions imposed by those on-line services. You guessed it! They can all be easily obtained from the Internet! Granted, not all of these demos are worthy of my attention. And, I must also say that I don't really care for the profanity and focus of some of these non-conforming demos. But even though a demo may contain a few cuss words, it doesn't mean that it can't be a truly magnificent masterpiece of Commodore code (i.e., Eternal).

Since February, I have also had the pleasure of meeting quite a few members of the demo scene through the IRC on channel #c64 and #c64ntsc. The IRC

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allows me to chat real-time with other Commodore Users from all over the world. For me this feature has truly become a blessing. I get to find out first-hand about all the upcoming demo releases. And, even better yet, I can have demos transferred straight to my Internet file space area (often called a workspace) straight from the disks of the original demo author through the use of a *dcc transfer*. Another feature I simply can't live without is my e-mail. E-mail allows me to send my articles to my editors instantly upon their completion. It also allows me to receive programs from other on-line demo addicts such as myself. I can't tell you how much of a thrill it is to come home from a tough day at the office to an e-mail box containing a brand new demo! Better yet, it's faster and cheaper than the U.S. Postal Service!

I realize not all of you are into demos as much as I am. But, there is something available on-line to feed almost any craving imaginable whether it be games, GEOS programs, music, graphics or even non-Commodore interests. On the web you can catch up on all your favorite television shows, receive instantaneous sports results, read up on current news events, do your shopping, make travel plans and much, much more. There is something there for everyone and you honestly don't have to have a fancy graphics browser to access and enjoy it. Try it, you just might like it!

That's all for this month. Next month we'll discuss the items you'll need to access the Internet and how to combine all those ingredients to get you up and cooking. If you didn't understand some of the terminology I used above, don't fret because future columns will explain everything to you in everyday English. I promise! Until then, remember, if you have a question or topic you'd like to see covered, I can be reached via e-mail at qt@telerama.lm.com or you can write to me via LOADSTAR. Ciao!

Getting on the Net

By John Elliott. Manuals and magazine articles rarely describe frustrations of detail that increase the difficulties in making our computers work with the Internet. It took me more than three weeks of periodic attempts before I could read and use the menu my provider had prepared for at this server location. In configuring my software for my modem, I had set for the wrong speed, wrong terminal mode, and had not turned on "*flow control*" to adjust for the speed with which text arrived on-screen.

Simple Manual Configuration: Years ago, in the mid-late 1980's I used my memory expanded VIC 20 to chat about education with teachers mainly in North America and Australia/New Zealand. After setting up my software so that whatever I typed was echoed from the receiver back to me, I dialed with my keyboard *atdxxx* in which *x* represents the phone number. The number I dialed was a special "*Datanet*" number which routed my call to a computer center in another province which sent my call around the world. The number I called was local, saving on long distance charges. The use of the number, and the computer center, were paid for by the educational authorities for our three Maritime provinces.

More Sophisticated Configurations: I think all modem software programs will accept manually typed commands. With my VIC 20 I had no choice. "at" will get your modem to pay attention. "*atdp*" (pulse) or "*atdt*" (tone), followed by the phone number, will dial the bulletin board or Internet provider. Prompts should then appear on-screen that will take you where you want to go. On your first access to a bbd or provider, you may be asked whether you want the echo on or off. If you can see what you are typing, you want the echo on. Alternately if what you type appears doubled, you want the echo off. If you are asked what your protocol is, you must know what terror correction system your modem is set for. The newer systems use *x, y,* or *z* protocols, although *Kermit* is still found. You may be asked what your baud is. This is not a physical fitness test. Your baud or bps is likely 300, 1200, 9600, 14400 or 28800.

Depending on your modem software, you may have to answer all the above questions once you load the program. This will configure your system. It should be remembered by your software the next time it is loaded. Because I am working with a high speed modem, *Novaterm* 9.6 makes some of these decisions for me. Remember that if you are working at 14,400 BPS or faster, you should likely look for some kind of "*flow control*" command to prevent text piling up on-screen.

An Internet Precursor: While there was no "Internet"in the 1980's, there was *Fidonet*. Volunteer electronic bulletin board operators forwarded messages received from other operators, *sysops,* where possible with local calls. Long distance calls were sent at low rate times late at night with at that time very high speed (2400 BPS) modems. Fidonet still operates, but not directly within the Internet.

Only Mac and PC Need Apply: When our educational authorities moved to the Internet, I lost my Fidonet connection. For a number of reasons, I could not use the Internet. I had before the loss of Fidonet, moved from 300 BPS to a 1200 BPS modem. Text scrolled more quickly than I could easily read. I also switched to a Commodore 64 which used a more sophisticated Macintosh emulating *Geoterm* program. Macros and scripting made many operations automatic. I could not however get on the Internet since the two local Internet provider companies required that I run software that only works on PCs (and then only from *Windows*) and the Mac. They would only provide me with a phone connection to the Net (a "slip" connection).

The Freenet Solution: I am a long distance call from a solution. There is a "*Freenet*" in a nearby city that will run the communication software on its hard drive. I am allowed to dial up their computer and send commands to it as if I were a "*dumb terminal*" connected to a mainframe. This is called a shell account. This "Freenet" requests donations of $20 a year to help subsidize costs. It largely operates through hardware and software donations and volunteers. If I were to phone them directly, I would have to tolerate frequent busy signals, because of their limited resources. A late night call would cost me about 50 cents a minute. If I were on for 10 minutes a day, a month's usage would cost me $150.

The Local Shell Account: Recently a new local Internet provider has established a shell account service. I can make a local call, enter my user name and password, have my call routed (*telnetted*), to the company's service center in a nearby town, and

use their shell menu on their very large very fast hard drive. I can send and receive E-mail, store it at my "shell location," or through screen captures save any mail to my disk drive. The newsgroup reader allows me to select topic areas subscribed to by users with common interests, ranging from educational specialty to a favorite soccer team.

I cannot use the file storage areas on my provider's disk drive. This means that I cannot upload my E-mail messages, or download what I receive. When a developer sent me E-mail with a beta version of his software attached, I was not able to download and run the attachment. I cannot use the storage area because someone previously entered my provider's drive via a modem and corrupted his files. The "hacker" was traced as far back as Kansas City, but may have simply routed through that location.

My third option however, eases the situation. I can use telnet from my shell account to reach the previously mentioned Freenet, without long distance charges or busy signals. I can upload and download E-mail, and other files on their hard drives.

Lynx: Unlike my local provider, they also run a program which I can use on the World Wide Web. My keyboard and screen emulate that of this computer which is 70 miles away. Using this program, Lynx, I can view any Web page available to Macs and PC's. I can fill in forms, send E-mail to the pages' creators and download pages or files provided. I cannot view most web page images, or listen to any sounds or music. Text does not dance across the page.

Text-Only Limitations: If what I hear at conferences is correct, the lack of images, sound and motion is not yet a severe deficit. The vast majority of Internet traffic is E-mail, which is provided by my local shell account. Over half of the users of the World Wide Web, use it mainly in text mode, which is Lynx's mode.

Modem Speed Requirements: In order to connect with my local shell provider, I had to use a modem set for at least 9600 BPS. The maximum reliable speed for a Commodore 64/128 modem directly connected to the computer is 2400 BPS. I had a cartridge which permits connections of serial devices (modems and null modem cables) at up to 34,800 BPS. I bought a PC modem designed to operate at 28000 BPS. A standard telephone line connects my modem to the wall telephone junction. Another line links my modem to my telephone. When the modem is not in use, I use the telephone as normal.

Cross Platform Access Solution: My situation for several years was the worst possible scenario. I did not have access to a local shell account provider. My compromise was to download and save to floppy disk what interested me from my E-mail and web searches on a PC at work. At home with the appropriate software and hardware (*Big Blue Reader* and a 1571 or 1581 drive), I converted the files to Commodore format. I then viewed, converted, saved and printed the GIF image files and read, saved and typed replies to my E-mail. Whatever text I needed to send I type with my word processor, converted to ASCII format with BBR, saved to a PC format disk and uploaded at work.

Surfing the Net via E-mail: When I obtained a local shell account, I was able to save E-mail directly to Commodore format disk and upload directly from the same format, as long as the document had been saved as ASCII. Before I used telnet to use Lynx, I used E-mail to acquire web pages. I E-mailed to "agora@www.undp.org". In the body I typed "SEND" and the web address I required. My only difficulty was that I received all the pages' text with the code surrounding it. Since many parts of the 3rd world (and many university accounts in this world), only have E-mail access to the Internet, this is not a trivial application of E-mail.

Accessing the WWW Via Telnet: Before I telnetted to my area Freenet, I telnetted to Lynx providers around the world. Many universities allow the general public to use their copy of Lynx, but block access to their file storage areas. I cannot therefore upload and download files with their copies of Lynx. I still find these copies of Lynx to be faster than my Freenet, possibly because they have more powerful equipment. The Lynx site I use most often in this way is "sailor.lib.md.us" in Maryland.

Although my high speed modem and large ram disk speed up my Internet operations, and were essential to get on line with my local provider, many readers will be able to get a local shell account that will work at 300 BPS. My expanded VIC 20 would work nicely for them.

Some Possible Futures: There is available on the Net a demonstration *slip* program for the Commodore. With it, a user does not require a shell account. If a provider will give the user an IP number, the procedure is to phone the provider with, in my case, Novaterm 9.6, leave the communications program, run the slip program, type in the IP number and access the Net. As yet, it will provide newsgroup access and telnet ability only. Telnetting must be by number, not name. While you could telnet to a Lynx site, you would then be on someone else's shell account. You would not be dependent though on a local provider to set up a shell account.

Maurice Randall, the creator of Geofax, is developing an Internet browser that will go well beyond Lynx for Commodore users. It will not be a slip program, but will among other features code and decode gifs.

Perhaps a linkage of Novaterm 9.6 (or other recent communications programs such as *Desterm*) with the two above alpha stage programs will allow Commodore users to dial directly and use the Net without special provisions by sympathetic Internet Providers.

Beyond the Internet Footprint: For the rural user who has no local access to any provider or PC connection at work, I would recommend a couple of late night long distance calls a week to an available provider where you could quickly upload your own messages and download your E-mail for off line reading. If you requested web pages in this way, you would not be charged for web search or page downloading time.

John Elliott is a professor at Nova Scotia Teacher's college, and is a tenured Commodore Enthusiast.

Desktop geoPublishing, Part 1

by Scott Eggleston. I've said before that if you're going to do any kind of series desktop publishing on a Commodore, you'd better learn geoPublish. Run from the GEOS environment, this simple but powerful package can give you the necessary tools to make a really nice looking document. From a flyer, to newsletter, to instruction manual, geoPublish can help make it happen. It's also the only Commodore DTP that really works with a laser printer.

This marks the start of a series on geoPublish, the application which I've become very familiar these past few years while producing the Underground. I hope to cover the basics, as well as some tricks and tips that can help anyone trying to get the most out this GEOS jewel. Before that can happen, however, I have several suggestions to prepare you and your system to use geoPublish to its fullest.

The first item involves some self-education. Not many of us (myself included) are born with the natural ability to properly layout a page. An art form in itself, there are some rules and guidelines that really should be followed. Top notch content filling a sloppily laid out page only diminishes its value, and screams "don't read me!" Following a few basic rules of layout can greatly add to your overall look.

There are many resources which we can turn to for more information on this subject. Your local library is probably filled with books on the subject of layout and page design. Try to get one on desktop publishing that isn't for users of any particular software.

An excellent title I've purchased myself is "Looking Good in Print: A Guide to Basic Design for Desktop Publishing, Third Edition" by Roger C. Parker (1993, Ventana Press). This book not only covers the basics of layout, but every aspect of creating quality products in the printed media. Newsletters, advertisements, business letters, brochures and even resumes are all outlined, complete with dos and don'ts for every category. It's very well done, complete with illustrations to emphasize every example. At $24.95, it's a great information resource.

Another good source for layout and design is probably all around you. Newspapers, magazines, other newsletters, and the one you now hold, all contain various forms of layout. Study them and make note about what looks good, and what doesn't. Keep pages that you find especially appealing in a file folder. Feel free to copy someone else's design, or use your own creativity to improve it.

Now that you've expanded your brain, it may be time to expand your system. Your most valuable commodity is going to be time, and the quicker you can put together your document the sooner you can watch that episode of "The Twilight Zone" where everyone looks like a pig. The following suggestions could be considered optional, but will greatly improve the performance of geoPublish.

First, get a mouse. Many of you may already have one of these, but I fear there are also many who do not. I'm not sure how anyone could use any GEOS application without these little rodents, but I know they do. They use joysticks, which really have no place in the GEOS environment--and geoPublish is no exception.

I once read a reviewer state that using a joystick in a program intended for a mouse was like trying to wash your feet with your socks on. It'll work, but not very well. A mouse is ideal for geoPublish, allowing more precise movement and placement of text and graphics. Trust me, using a mouse will save you time and frustration.

Two mice are still available on the open market. For the Porsche model, CMD offers the SmartMouse, a proportional device with a built-in Real Time clock, and special software. At $49.95, it's the most expensive, but comes from CMD, who's high standards in quality hardware are well documented. For the original workhorse, Paxtron is selling Commodore's 1351 for $19.95. This was the first Commodore-compatible proportional model, and will do the job quite well. DO NOT get the 1350--it's basically a rolling joystick. It only *looks* like a mouse.

Second, get some kind of RAM expansion. At 99k, geoPublish is large, and disk intensive. Font and data files are loaded every time there is a screen update. The entire data file saves itself when you change pages. Common sense will tell you that a virtual RAM drive with no moving parts will perform much faster than its literal counterpart. In this category, your choices are many. There are Commodore REUs, and PPI BBGs, not to mention RAMLinks, RAMDrives, and geoRAM. It is not within the scope of this article to cover all of these devices. Sources of availability are printed at the end of this article.

What is important is that you give yourself enough memory to work with. At 170k, a virtual 1541 doesn't give you much room. With geoPublish taking up more than half of the drive, there's hardly any room for data, font, and support files. Since this drive size is limited only to the Commodore 1764 REU (256k), this is probably a moot point.

Creating a RAM-1571 (360k) should probably be considered a minimum, with a RAM-1581 (880k) the best option. Native partitions within RAMLink or RAMDrive may work as well, but may cause compatibility problems with certain software. At any rate, give yourself as much room as possible, and you should be fine.

Large projects may force you to split files within a partitioned RAM device. My RAMLink uses three 1581 partitions for GEOS. One is a boot partition with all the autoexec files, another for geoWrite and geoPaint, and the third for geoPublish.

Note that you may need special software to recognize the larger RAM disks. While the RAMLink, RAMDrive, and BBG series come

(Continued on page 8)

Geopublishing Continued

(Continued from page 7)
with software to drive them, you may have to find a special Configure (2.5 version) file to recognize Commodore REUs expanded above 512k. These files can be found in many places. Check BBSs, user group libraries, or FTP sites (such as ccnga.uwaterloo.ca) for availability.

Third, speed everything up with an accelerator. Graphic User Interfaces can be real speed bottlenecks, as Windows and Mac users already know. While those machines have lots of add-on hardware to quicken them up, our choices are much fewer.

The first accelerator made was the Turbo Master 4 MHz, made available back in the late eighties. This large cartridge didn't always work with everything, was only compatible with 64 mode, and often caused graphic "artifacting" on the screen. Within GEOS, however, it apparently worked well. The Turbo Master is no longer available, but one may turn up used somewhere.

It seems CMD can always be counted on to fill almost any Commodore gap, and they have done so again. The SuperCPU is a 20 MHz accelerator, recently made available at $199 for the 64 version, with a 128 version on its way. Special GEOS software is provided so the old program can handle all this new speed. I've never used a SuperCPU, but would love to try it with GEOS. Twenty times normal speed would definitely make anyone a happier geoPublisher.

Fourth, compose text outside of geoWrite. This may seem like sacrilege to some (especially in a GEOS column), but I don't care for geoWrite much. Features are limited, geoSpell runs outside of geoWrite, and it's slow (ignore this point if you adhere to suggestion number 3). Other text-based word processors are just plain better, making writing a much nicer experience.

I'm a Write Stuff-er, myself, and like the flexibility, convenience, and speed that program gives me. Text is easily converted to geoWrite with Joe Buckley's Wrong Is Write, and global font and ruler settings can be imposed using Rick Krantz' Toolkit. Any word processor will work with these utilities, as long as you can save files in PetASCII or ASCII format.

By following these suggestions, you can really ramp-up for pushing geoPublish to new creative heights. Of course, you can ignore each and every of the above, but you'll be desktop publishing a lot longer than you really want to be. Next issue we'll get into the meat of geoPublish by starting a document at the core of creation--the Master Page. 🖫

Super 1750 Clone (512k), $99.95

Software Support International
2700 NE Anderson Road, Suite A-10
Vancouver, WA 98661
(800) 356-1179

BBGRam (Battery-Backed RAM Disk)
512k, $92.97
1 meg, $123.97
2 meg, $165.97
BBU (Battery backup for 17xx series REUs), $61.97
RAMDrive 1 meg, CALL
RAMDrive 2 meg, CALL

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5 Upper Loudon Road
Loudonville, NY 12211
(518) 436-0485

RAMLink
0 meg RAMcard, $149.95
1 meg RAMcard, $199.95
4 meg RAMcard, $299.95
Real Time Clock add $20.00
Battery Backup add $24.95

Creative Micro Designs
P.O. Box 646
E. Longmeadow, MA 01028
(800) 638-3263

Wrong Is Write
Toolkit

Both these programs are available on "Underware" disk #12. To get this disk, send a formatted disk (any type) in a mailer with return postage (or if you don't want to send a disk, just send $2) to:

Underware Request, disk #12
c/o Tom Adams
4427 39th Street
Brentwood, MD 20722-1022

Mondo Monitor Switch Continued

(Continued from page 2)
pairs of RCA input jacks (identical to the 1702's), one pair of output jacks, and three push-button switches. That price definitely beat building one from scratch.

Now I have the gizmo hooked between my two computers and the 1702. Clear input can be seen from either machine, with the flick of a switch (which I only have to do once). Remember, you have to have a special cable from your Commodore to split the composite signal for the monitor. The cable should come with the monitor, but if it didn't, instructions for building one can be found in Commodore World #7, page 49.

There are couple of other items you need to note if you want to use this switch setup. Remember that once you plug in your two video connectors, you'll still have a couple dangling audio cables. I recommend getting two female-to-male extension cables, and hooking each cable into a separate monitor's audio jack. You could also combine the two into one jack with a double female-to-male "Y" cable.

Also, you'll need two male-to-male RCA cables to run out of the switch and into the '02. If you can't find any of these laying around, you can always use two of those old cables that ran from the computer/TV switchbox to your

Commodore. One of these came with every Commodore 64, and makes a great audio/video cable. You probably threw yours out, didn't you?

So, there you have my simplest hardware project yet. There is no comparison of clarity between using the front vs. back inputs of the 1702, so don't even use the front jacks with your computer. Save it for input from your TV, so you can watch football during your programming breaks. 🖫

Facts About Refilling Inkjets

By Jeff Jones. I found this rather self-serving FAQ file at: http://www.starink.com/inkjet.htm

This Canadian company, Star, sells everything you need to re-ink your inkjet printer. Since my Epson Stylus II Inkjet printer cost me a mere $250, but I've since spent $150 in ink, I'm in the market for a re-inker. The company offers some great prices compared to new cartridges, and is the *only* place I've seen that sells Stylus II refills. I'm running the FAQ and giving a partial price list as a public service. I plan on buying my next cartridge from WAL-MART (because I need it tonight for a proof of the newsletter), but tomorrow I'll order a color and black and white re-inker for my EPSON STYLUS II. Until then, please remember, buyer beware.

1. Are inkjet cartridges easy to fill? Yes. Some are a bit more difficult than others but they are simple enough for the average person to handle

2. Will using a refilled cartridge void my warranty?

The reason that some manufacturers suggest that using a refilled cartridge could void your warranty is simply because they want to sell you their new ones from which they make huge profits. An inkjet cartridge refilled properly with the correct ink will not damage your printer. Star only uses the correct formulations for each type of cartridge to ensure long life from your printer and cartridge. If you do have a warranty problem it is suggested that you put a non refilled cartridge into your printer so that the dealer will not have any reason to try and void your warranty.

3. Are all inks the same?

No. Most cartridges use different inks. We carry over 40 types of ink to provide the proper fill for your cartridge

4. Can the wrong ink damage my printer?

Yes, it is important to use the proper ink not only for proper color but particularly to avoid damaging the print head where the print head is internal to the printer. This can come about over a period of time where the suspended particles are too large and clog the printhead.

5. My printer stopped printing and I'm sure there is ink in the cartridge.

The first thing to do is run printer clean cycles. Sometimes it is necessary to run five to ten in a row, particularly with Canon printers.

6. I tried that it still doesn't print. What's next?

Gently clean your printhead with a Q-tip that has been dipped in a solution of 50% water and 50% household bleach. Follow with a Q-tip dipped in water alone.

7. How do I get my HP printer to do a test print independent of the computer?

While depressing the LF button turn on the power switch.

CANON

Canon BJ-5,10,20,200,200E,FAX Black - 6 Refills	$12.95
Canon BJ-70 Black -15 Refills BCI-10	$14.95
Canon BJ-70 Tri-clour-15 Refills BCI-10	$26.95
Canon BJ-210 Tri-Color 15 Refills BC-05	$26.95
Canon BJC-600/610 Black - 10 Refills	$13.95
Canon BJC-600/610 3 Colors - 10 Refills	$26.95
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Canon BJC-4000/4100 Black 20 Refills BCI-21	$14.95
Canon BJC-4000/4100 Black 5 Refills BC-20	$16.95
Canon BJC-4000, 4100 Tri-Color - 20 Re BCI-21	$26.95

EPSON

Epson Stylus 400/800/1000 Black 6 Refills	$12.95
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Computerized Freebies: Your Image Burned Into Wood

By Jeff Jones. I found this on the Internet. I took the company up on the offer and was pleasantly surprised. If you have a portrait you'd like made into a laser-cut wood burning, I suggest trying these people. But please remember that they are a business so if you like the product, try making at least one $10.00 order. I spoke to the owner for about a half hour. These are good people.

Subject: Re: FREE!! Your Photo Burned into wood
Date: Wednesday, August 21, 1996 8:50 AM
natures-canvas@sockets.net wrote:

Natures Canvas, a NEWLY DEVELOPED process allows virtually any image to be printed onto the surface of wood. THIS IS NOT A PRINT! Your image is actually burned into the wood, with the finished product taking on a sepia-like quality.

To familiarize people with our product, we are offering to print a sample, of your photo, absolutely free. Your finished size on the free sample will be 5x7, with 8x10 available. To receive a sample, simply send your scanned image to natures-canvas@sockets.net, along with your return address. We will print and ship your photo the next day! Or send your print to:

Natures Canvas
1575 Old Us HWY 40
Columbia, MO 65202

Ask for the FREE PRINT from the Internet. All Prints will be returned with order. For those that would prefer, a standard sample is available.

This is a truly unique product, why not see what you're missing!

Rick
Natures-canvas@sockets.net

STAR WAREZ #1 Continued

accessories, drivers, and unique screen utilities by Spike Dethman are provided here for your use. Among these files are updated Koala Pad Drivers, Port 2 Drivers, an Envelope Address printer, geoPack, Meltdown!, Termite, and Fortune. Due to the quantity of Spike Dethman files I've only listed a few samples so you can get an idea of what the disk contains. My favorite of all the Spike Dethman files is Fortune, which is an Ancient book of Computer Proverb provided solely for our amusement.

Finally, you'll come to Driven #16, the last but certainly not the least worthy file of Star Warez #1. In case you haven't heard of Driven, it's a disk magazine devoted to the Commodore Demo Scene. Issue 16 speaks of the unique spirit of the Demo Scene and urges the Commodore Community to partake of it but not to take it for granted. It also features current events, reviews of current demo releases, news and results from the latest demo parties and a whole lot more. Many of the articles are written by demo sceners and much like the aforementioned demo, Eternal, some of the articles unfortunately contain a few words of profanity. But, if you enjoy demos, it's a worthwhile read.

That's it for this first edition of Star Warez! I hope you find it both useful and entertaining. See ya next month! Remember, if you hear of something you'd like to see featured in an upcoming edition, you can E-mail me at qt@teleram.lm.com or write to me care of LOADSTAR. See ya next month!

In order to receive the Star Warez Disk, send a formatted disk, returnable mailer, label and return postage OR send $2.00 and receive the latest issue of Star Warez! to:

Star Warez!
c/o Tom Adams
4427 39th Street Brentwood, MD 20722-1022

tom.adams@neteast.com or call (301) 927-8826.

New 8-Bit Conversion Service

by Jeff Jones. Donald Seagraves has just started a new service, *Commie Conversions,* which converts PC format graphics into geoPaint documents. He uses a PC to dither down JPGs, GIFs, RAWs, PICs, LBM an even your KODAK Photo CD images to PCX. From there he takes them over to a 128 where he converts to geoPaint. His prices are quite reasonable at $3.00 for your first ten images and 25 cents for every file thereafter. He'll do 100 files for $20.00. I say take him up on it before he realizes how low his fees are. This is a lot of work, and as far as I know, no service bureau caters to the Commodore community in this way.

He's willing to tweak your document for brightness, sizing and contrast to give you the best possible pic.

The only thing missing was a scanning service (hint hint). I think the Commodore community could use a low-cost way of getting snapshots into geoPaint.

Donald Seagraves
401-A Northern Dove Ln.
Coppers Cove TX 76522-8432

(Continued from page 1)

that the UITI(R) runs on an enhanced Amiga+ operating system which, VIScorp says, is internationally recognized as one of the finest multitasking multimedia systems, as well as one of the most cost effective systems. The UITI(R) comes equipped with a built-in modem; includes special fonts and graphics so that networked text, data and images can easily be read at normal viewing distance; contains random access memory (RAM) to enable users to download text, messages and other information; and, comes with a sleek, easy-to-use remote control with an imbedded keyboard for convenient information input.

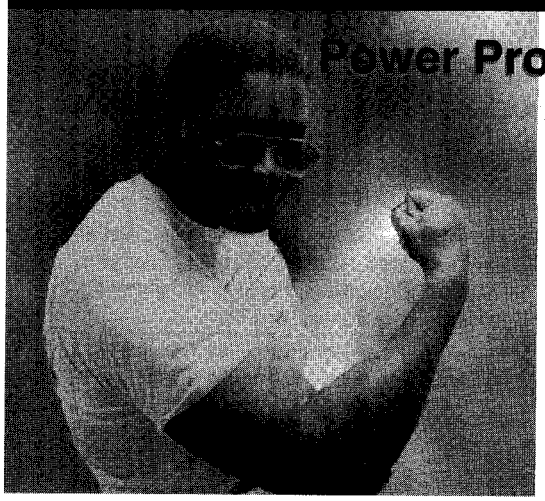
"We are extremely excited about the prospect of our product carrying the Emerson Radio name," said Mr. Buck. "Emerson is an internationally recognized leader in consumer electronics, with a reputation for quality and value."

Eugene I. Davis, President of Emerson, stated: "We are very optimistic about the inclusion of UITI(R) technology into our product mix going forward.

We believe that convergence products will be a major emphasis in the consumer electronics business over the next several years and we believe that Emerson will be a value product to the mass market in this area. We believe the Emerson Radio brand name, which is recognized as one of the top brands in consumer electronics, will help drive not only the Internet-television interface products, but also the second and third generation units which VIScorp has already demonstrated to us. We are currently a major supplier to some of the largest retailers in the U.S., such as Wal-Mart, Target and Kmart and believe these retailers will be looking forward to getting into interactive TV products with the Emerson Radio brand name, a brand name that has always sold well in their stores." For more information on VIScorp and its products, and to contact principals via e-mail, visit the company's Web page at www.vistv.com, and direct e-mail to flo@vistv.com.

For more information on Emerson Radio Corp. and its products, interested persons may contact Eugene I. Davis, President, at (201)428-2000, or Adam Friedman at KCSA Public and Investor Relations at (212)682-6300, ext.215.

Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies. Contact: Jason Compton, Communications Manager, Amiga Inquiries



Power Programming: Basic To ML Part II

Hybrid Programs
By Jeff Jones

Who says I'm a SYSie? I do! Before we examine further the concept of using BASIC to outline monster ML programs, we need an important tool — one I can't do without. Sending parameters to an ML program is possibly the best of programming environments. You have the power of ML, but the ability to tweak it without cumbersome POKEs or re-assembling, That's why I say *SYSaddress,parameter,parameter2,...* is the best thing to happen to BASIC since USR(x). Adding parameters to machine language is virtually indistinguishable from writing a new language. As a matter of fact it's better because you don't have to hook your language into IMAIN or fiddle with any other vector.

I'm a firm believer in keeping things as simple as possible. Fancy code means fancy errors — and I've never referred to a debugging session as fancy. That's why I've never come up with a MENU BASIC instead of a MENU TOOLBOX. My code is full of enough bugs.

You want to extract a number from a line of BASIC. That number can be -32767 to 63355. That number can be in the form of a formula or literal or variables or an expression such as *SYSaddress,sqr(h%(sin(x))*54-6/2*

Sound difficult? It's not. For a simple integer or a complex formula the same simple subroutine gets the number for you. All the JSRs in the code that follows are making calls to BASIC, which was quite well-written by Microsoft years ago. The magic of the parser in BASIC does all the work for you. Insert the following code in your ML program and you can send parameters to your ML.

```
get'number jsr $aefd
jsr $ad8a
jmp $b7f7
```

Make one jsr for every parameter you expect. The number shows up in two places: the *.Y* and *.A* registers (in low/high order) and in locations $14 and $15. Negative numbers show up looking like numbers which are higher than 32768, which, by the way, is why `fre(0)` appears as negative when you have more than 32768 bytes free.

Strings are passed with the following subroutine:

```
get'string jsr $aefd
jsr $ad9e
jsr $b6a3

ldx $22
ldy $23
rts
```

Your ML processes the string by finding it according to locations $22 and $23. The length of the string is returned in the accumulator. You can use all the manipulative and concatenation power of BASIC to generate the string and this routine will return a clean, unsegmented string. If you pass a single variable, $22 and $23 point to the place where the variable is stored, and you can do direct manipulation or copy it to another location. It all adds up to power and fast development of powerful code.

Next month, I'm going to fit in this column an ML routine that processes a data file. We'll have it strip all carriage returns. This is a job we know will take forever in BASIC. We're going to do it in seconds with ML, using a BASIC program as an outline. Till then, try and figure out how you would write such a BASIC program.

Shell Accounts Conclusion

(Continued from page 1)

money is just a green as anyone else's, and a you may be able to convince someone to implement a Unix environment. If you're part of a user's group, get some commitments from more people than just yourself. The more monetary incentive you can offer a provider, the better your chances.

Look for freenets. These are usually run by the state at very low-to-no cost, and are almost always accessible by everyone (i.e. Commodore users with VT-100 or ASCII terms). The features on freenets may be limited, but at the very least you'll get Email.

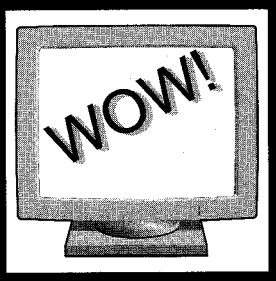
Try local bulletin boards. These may be getting pretty scarce, but some are converting themselves to Internet gateways in order to stay alive. Prices may be a little higher than a straight provider, but it's better than paying long distance bills to call one.

Finally, a service may be your only option. This should be a last resort, as pay services charge by the hour. These include Compuserve, Genie, and Delphi. Don't try AOL as it requires client software that won't run on a Commodore. If you haven't guessed, I'm not a big fan of theirs. They used to run QuantumLink, and did a rather poor job the last two years it existed.

For more information about Unix and the Internet, check your local library. They may even offer Internet access as well.

No-Prompt Transfer Tip:As mentioned, my provider does not let me drop to the prompt, which I can use to change transfer protocols. Since they only offer Zmodem from the download menu, I felt stuck since my term doesn't offer Zmodem. I found a way around this, however. Just select your file to download, and when the Zmodem send activates, implement Ymodem from your term. It may download slower (more like Xmodem), but it works. This little trick was a relief to me, allowing me to stick with my favorite terminal program, Dialogue.

Centsible Systems Monitor Blowout!



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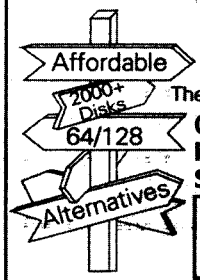

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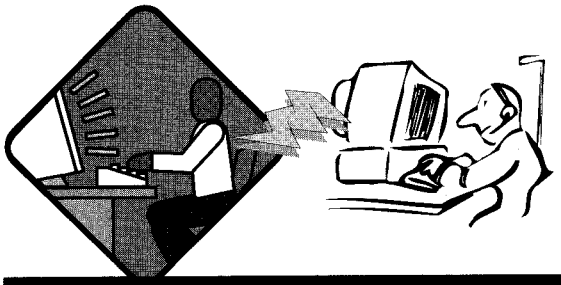

100% Electronic! Scott Eggleston, Sherry Freedline, John Elliot & Jeff Jones collaborate over the Internet to produce this newsletter, never using snail mail for any article!